



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/672,766   | 09/26/2003  | Max W. Durney        | A-69466-3/RBC/VEJ   | 9673             |
| 32940  | 7590        | 01/25/2006           | EXAMINER            |                  |
| DORSEY & WHITNEY LLP<br>555 CALIFORNIA STREET, SUITE 1000<br>SUITE 1000<br>SAN FRANCISCO, CA 94104 |             |                      | CRANE, DANIEL C     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3725                |                  |

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/672,766 | Applicant(s)<br>DURNEY ET AL. |  |
|                              | Examiner<br>Daniel C. Crane   | Art Unit<br>3725              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 121-161, 153 and 169-172 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 121-161 and 169-172 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3725

**CLEAR LINE OF DISTINCTION**

The following statement again is made of record to put applicant's attorney on notice that claims of this application must be clearly distinct from claims of applicants' other patents and applications. Again, this application is a division of a previous patent application. Because of the similarity of the claimed subject matter, it is applicant and applicants' attorney's responsibility to maintain a clear line of distinction between the claims of this application and Applicables' parent application.

**BASIS FOR DOUBLE PATENTING REJECTION**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**DOUBLE PATENTING REJECTION**

Claims 121-161 and 169-172 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-49 of U.S. Patent No. 6,877,349. Although

Art Unit: 3725

the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to the skilled artisan at the time of the claimed invention to have modified the claim language to eliminate the edge to face fulcrum bending so as to effect the claimed bending of the pending claim language resulting in a broadened bending process. Similarly, positioning the spacing of the laterally located slits relative to the bend line other than the patented jog distance would have been obvious so as to accommodate different plate thicknesses.

Claims 121-161 and 169-172 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-47 of U.S. Patent No. 6,481,259. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to the skilled artisan at the time of the claimed invention to have modified the bending process and bend material by forming slits that have, by virtue of their arcuate and divergent straps, have stress relieving structures to facilitate bending of the sheet of material. Accordingly, the skilled artisan having the benefit of the claimed provisions would have recognized the equivalence of the stress relieving features to the strap construction proffered by the claims of the present application.

#### **REJECTION OF CLAIMS OVER PRIOR ART**

Claims 134-137, 143-147, 150, 151, 154-161 and 169-172 are rejected under 35 U.S.C. 102(e) as being anticipated by Gitlin (6,640,605). See Figures 8, 9 and 10 and column 7, lines 1-32, where the “edge” 34 of sheet 10R engages with the “face” of sheet 10L on opposite

Art Unit: 3725

sides of the slit 14 when the sheet is bent along the bend line A (Figure 8). The strap 40 (Figures 9 and 10) is depicted as angled relative to the linear bend line so that it is neither parallel nor perpendicular to the linear bend line. Accordingly, each strap has a surface that extends between the longitudinally adjacent slits and extends in an “oblique” angle relative to the longitudinal axis. Arcuate slits are shown in Figures 10a-10f. See Figure 8 where the ends of each slit 14 are formed with rounded cuts that have convex sides and also define arcuate slit end portions. The rounded cut at the ends in each slit is formed with end portions “diverging away from the bend line”. See Figure 10a and 10e where the arcuate slit is arranged so that it curves “away” from the bend line by virtue of the fact that the arc does not coincide with the bend line. Increasing width dimension will occur in the Figure 8 embodiment since the ends of the slits are provided with rounded cutouts. Similarly, the Figure 10a and 10b embodiment will have increasing width straps due to the arcuate shape of the slits. What constitutes a reduction in residual stress during bending is open to broad interpretation when no reference point has been set out. The width of the kerf is shown to be smaller than the thickness of the sheet material in Figure 10. Figure 10f is shown to have a kerf of greater than the thickness of the sheet. As to claim 169, see Figures 10e and 10f.

Claims 148, 149 and 152 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gitlin (6,640,605). Selecting the width dimension for the bending straps would merely facilitate the ease of bend within the material. Accordingly, it would have been obvious to the skilled artisan at the time of the invention to have modified Gitlin’s process by further selecting a desired bending strap width for the purpose of facilitating ease of bend in the material. This

Art Unit: 3725

feature along with the material characteristic would be considered by the skilled artisan desiring a specific bend quality and bend structure. With reference to claim 152, the elasticity of the material will facilitate the bend in the material. Accordingly, the selection of the material, whether it is elastic or plastic, with respect to its bend capabilities, does not affect the overall process per se. It is the examiner's position that the skilled artisan having the benefit of Gitlin would have recognized the bend features on both materials.

## **RESPONSE TO APPLICANTS' COMMENTS**

Applicants' remarks have been carefully considered. With particular reference to Figure 8 and 9 relative to the broad claim 134, Gitlin's "arcuate slit end portions" (unlabeled) are shown as the curved opposing ends of the elongated slits 14. When viewing a pair of adjacent slits and the surface region between the end portions of the slits, which establishes a strap there between, that strap is configured by the curved end portions of the adjacent slits and defines width dimensions that extend from a minimum to a maximum. Clearly, the surface of the strap will extend obliquely across the bend line with increasing strap width dimensions on both sides of a minimum width dimension because the curved end portions of the adjacent elongated slits varies in width.

## **INQUIRIES**

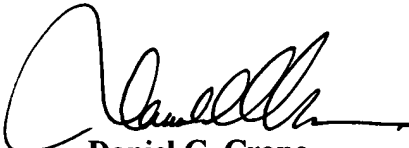
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is (571) 272-4516.

Art Unit: 3725

The examiner's office hours are 6:30AM-5:00PM, Tuesday through Friday. The examiner's supervisor, Mr. Derris Banks, can be reached at (571) 272-4419.

Documents related to the instant application may be submitted by facsimile transmission at all times to Fax number (571) 273-8300. Applicant(s) is (are) reminded to clearly mark any transmission as "DRAFT" if it is not to be considered as an official response. The Examiner's Fax number is (571) 273-4416.

DCCrane  
January 21, 2006



**Daniel C. Crane**  
Primary Patent Examiner  
Group Art Unit 3725